

Appl. No. 10/099,758
Amendment and/or Response
Reply to Office action of 15 March 2004

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REMARKS / DISCUSSION OF ISSUES

Claims 1-14, and 35-44 are pending in the application. Claims 35-44 are newly added. Claims 15-34 are canceled herein.

The applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority document(s).

The Examiner is respectfully requested to state whether the drawings are acceptable.

The Office action indicates that claims 3-4, 9, and 11-13 would be allowable if rewritten in independent form, including all of the limitations of their base claim and any intervening claims. Claims 3, 4, and 11 are correspondingly amended herein; claims 12-13 are dependent upon claim 11. New dependent claims are added, based on these allowable claims. No new matter is added.

The Office action rejects claims 1, 2, 5-8, 30, and 31 under 35 U.S.C. 102(b) over Bernstein (USP 5,956,292). Claims 30 and 31 are canceled, and claims 7 and 8 are amended to be dependent upon allowable claim 3. The applicants respectfully traverse this rejection with regard to claims 1, 2, 5, and 6.

The Office action also rejects claim 10 under 35 U.S.C. 103(a) over Bernstein. The applicants respectfully traverse this rejection.

In independent claim 1, upon which claims 2, 5, 6, and 10 depend, the applicants specifically claim a display substrate that includes a plate upon which at least one display component and an acoustic transducer are formed.

Bernstein does not teach or suggest a display component and an acoustic transducer formed on the same plate. Bernstein teaches an array of micromachined piezoelectric acoustic transducers 30 that form an "acoustic retina" 20 in an acoustic imaging system 10. The output of the retina 20 is provided to a separate visual display device 24 that creates a visualization of the sounds received from the transducers 30. There are no "display" components on Bernstein's retina 20.

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The Office action asserts that "Because the CMOS electronics [34/168 of the retina 20] controls display 24 as shown in FIG. 1, it can be considered a display component" (Office action, page 3, lines 1-3). The applicants respectfully disagree with this characterization of Bernstein's retina 20. As illustrated in Bernstein's FIG. 1, control electronics 22 control a transmitter 12, and the retina 20, and delivers the collected signals to the separate display 24. The retina 20 merely provides data samples to the display 24 via the control electronics 22, and cannot reasonably be said to "control" the display 24, as the term "control" is conventionally used in the art. The integrated electronics 34/168 in Bernstein's retina 20 "perform amplification and signal processing of the signal received from acoustic sensors 32 for delivery to switch 36... In this way the acoustic energy stimulating each of the pixels 30 of acoustic retina 20 can be read out and captured in data buffer 60 for subsequent creation of a visual image display" (Bernstein, column 4, lines 43-52).

Because Bernstein's acoustic retina 20 merely provides data signals that are used to form a visualization of the sounds received by the acoustic retina 20, the applicants respectfully maintain that Bernstein's acoustic retina 20 cannot be said to contain display components and an acoustic transducer on the same plate, as specifically claimed in the applicants' independent claim 1, and respectfully request the Examiner's reconsideration of the rejection of claims 1, 2, 5, and 6 under 35 U.S.C. 102(b) and claim 10 under 35 U.S.C. 103(a) over Bernstein.

The Office action rejects claims 1 and 7 under 35 U.S.C. 102(e), and claim 14 under 103(a), over Toki (USP 6,427,017). The applicants respectfully traverse this rejection.

In independent claim 1, upon which claims 7 and 14 depend, the applicants specifically claim a display substrate that includes a plate upon which at least one display component and an acoustic transducer are formed, the acoustic transducer being formed over a cavity in the plate.

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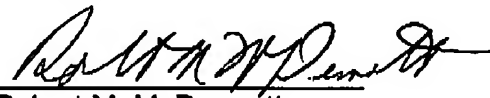
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Toki teaches a diaphragm holding frame 12 that sits upon an LCD panel to form a cavity 11 below an acoustic transducer. Toki's cavity 11 is not formed in the LCD panel that constitutes the plate upon which display component and the acoustic transducer are formed.

Because Toki neither teaches nor suggests forming a cavity in a plate upon which a display component and an acoustic transducer is formed, as specifically claimed in claim 1, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 1 and 7 under 35 U.S.C. 102(b) and claim 14 under 35 U.S.C. 103(a) over Toki.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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